

pital portion of back of the head, the measurements show that most of the bones of the skull are differently proportioned. The width of the face in *S. vellerosus*, moreover, is very much greater than in *S. v. fuliginosus*.

2. On Mammals collected in South-west Australia for Mr. W. E. Balston. By OLDFIELD THOMAS, F.R.S.*

[Received March 7, 1906.]

Following the generous example of our President and Mr. C. D. Rudd, Mr. W. E. Balston has been good enough to defray the expenses of a zoological collector, working for the benefit of our National Museum. The country chosen is Western Australia, where Mr. Balston has many personal interests, and where few Mammals have been collected since Mr. Gilbert, about 1842, made a collection for Mr. Gould, who was then preparing his great work on the Mammals of Australia.

For his exploration of Western Australia Mr. Balston has secured the services of Mr. Guy C. Shortridge, who had already had experience in Pondoland, South Africa, where he had collected Mammals and Birds for the South African Museum.

The collections worked out in the present paper were obtained during the end of 1904 and the course of 1905 from the following localities:—

King River, on Mr. Balston's estate near Albany, King George's Sound, where Mr. Shortridge had the assistance of Mr. Balston's sons.

Wagin, on the railway halfway towards Perth.

Beverley, just south of York, about 70 miles east of Perth.

York, Northam, Toodyay, and the Wongan Hills, all near together, are the localities which most frequently occur on Mr. Gilbert's labels.

Southern Cross, on the Eastern Railway, about 220 miles east of Perth.

Kalgurli, the gold-mining town, 140 miles further east, and about 200 miles from the south coast.

Laverton, 150 miles N.E. of Kalgurli, and about 470 miles inland from the west coast at Geraldston.

While the collections made at the first four places are full of interest and value, it has been a great disappointment to find that the gold-field country, at the two last-named localities, does not contain any desert mammal fauna, Mr. Shortridge having found that practically all mammals were absent except Bats. This seems to be due to the fact that the whole area is saline, without fresh water of any sort. Still further east, on the *Spinifex* flats, Mr. Shortridge has hopes of finding a desert fauna

* [The complete account of the new species described in this communication appears here; but since the names and preliminary diagnoses were published in the 'Abstract,' such species are distinguished by the name being underlined.—EDITOR.]

comparable with that occurring in Central Australia, the region of *Notoryctes*.

But even in the fertile south-west area, although the country supports a mammal-fauna rich in individuals, that richness is unfortunately now largely made up of introduced animals—cats, rabbits, rats, and mice, which appear to be the dominant members of the fauna at most places. Many of the smaller species, found in numbers by Mr. Gilbert in 1842, would seem to have been almost or quite exterminated by these introduced pests, and Mr. Shortridge has had great difficulty in catching any but the latter.

The following extract from a letter of his from Beverley will give some idea of the character of the country and his trapping experiences:—

“There are so many trappers about that I am beginning to get a good idea of the distribution of most of the larger mammals. With the exception of *Pseudochirus occidentalis*, I think I have obtained all the well-known larger mammals around Albany.

“There is a very well-defined coast-belt extending about 25 to 30 miles inland, which is generally low and rather swampy, thickly covered with Jarrah and Red-Gum trees intermixed with very thick undergrowth. On following the railway northwards from Albany, the country makes a sudden change at about Mount Barker, where the grass-land begins; it then remains very much the same as far as York, the White Gum being the most plentiful tree and the undergrowth being replaced by grass. The country in the grass-region is much easier to hunt in, as there are patches of undergrowth here and there where the animals collect. In this district there are many species which are quite unknown around Albany; in fact, all the mammals and birds which I got during a fortnight's stay at the Arthur River, 20 miles west of Wagin, were different to those collected around Albany. I secured specimens of *Macropus eugenei*, *Onychogale lunata*, *Thalacomys lagotis*, and *Bettongia lesueuri*, and I heard that Spiny Anteaters, Dasyures, and *Chaeropus castanotis* were also plentiful around the district.”

The collection now described contains examples of 32 species, of which two bats have proved to be new, while I have also given subspecific names to the Dasyure and Echidna, which have been previously known from Western Australia, but not distinguished from their eastern allies.

It is, however, not the novelties which give to this fine collection its very great value to the Museum, but the excellent series of specimens belonging to species of which the original examples have become deteriorated by time, and in many cases by that most destructive agency of all, exhibition in a public gallery. These good modern specimens, for which we are indebted to the generosity of Mr. Balston, will now form a basis on which further scientific work can be done on the fauna of this most interesting region.

1. *NYCTOPHILUS TIMORIENSIS* Geoff.

♀ (Bat *b*). King River, King George's Sound. Near sea-level.
190, 191. Southern Cross. 1160'.

Forearms 44–45 mm.

2. *NYCTOPHILUS GEOFFROYI* Leach.

♂. 166. Jaurdi Hills, near Kalgurli. 1250'.

♂. 175. ♀. 176, 189. Laverton. 1650'.

These specimens are of much interest, for they conclusively prove the correctness of Mr. Tomes's assertion that the small *N. geoffroyi* of Leach, with a forearm of about 35–36 mm., is a different species from *N. timoriensis*. Tomes's specimen No. 1, from Albany, King George's Sound, recently acquired with his collection by the British Museum, may be treated as typical of Leach's species, whose type was without locality.

Mr. Shortridge's specimens agree very well with this Albany individual in proportions, but are rather browner in colour.

3. *VESPERTILIO PUMILUS* Gray.

♂ (Bat *a*). 2 & 3. King River, King George's Sound. Near sea-level. February.

♂. 139, 141, 142, 143. Parker's Range, Southern Cross. 1163'. 9–17 August.

♂. 161, 164. ♀. 140, 148, 162, 163, 167. Jaurdi Hills, Kalgurli. 1250'. 21 Sept.–5 Oct.

"The most plentiful bat around Albany."—*G. C. S.*

4. *PIPISTRELLUS TASMANIENSIS* Gould.

Noctulina tasmanensis Gray, List Mamm. B. M. p. 194 (1843) (*sine descr.*).

Vespertilio tasmaniensis Gould, Mamm. Austr. iii. pl. xlviii. (1858).

Vesperugo krefftii Peters, MB. Ak. Berl. 1869, p. 404; Dobson, Cat. Chir. B. M. p. 232 (1878).

♀ (Bat *c* 1). King River, King George's Sound, 26 February, 1905. Near sea-level.

This is a very rare bat, no previous specimen having reached the Museum since the original type referred to by Gray and Gould. Another example, from Tasmania, is in the Tomes collection.

5. *PIPISTRELLUS REGULUS*, sp. n.

Bats 4, 5. King River, King George's Sound. Sea-level.

A medium-sized species of the group with minute outer incisors.

Size rather larger than in *P. kuhli*. Fur rather long and shaggy (hairs of back slightly over 5 mm. in length), extending thickly as a well-defined band on the interfemoral above for its basal half-inch to the level of the knees. Below, the same area is more thinly covered, and there are a few hairs on the membrane near the sides of the body. General colour above dark Prout's

brown, the terminal third of the hairs lighter and more approaching russet, especially posteriorly, the basal two-thirds blackish. Below, the ends of the hairs are nearer wood-brown, except on the interfemoral band, where they become whitish. Ears small, too much shrunk and distorted for exact description, but their inner margin appears to be unusually convex; tragus not broadened. Wings to the base of the toes. A narrow post-calcareal lobule present.

Skull long and narrow, with an unusually low flattened brain-case; no occipital helmet, the lambdoidal crests commencing rather low down on each side.

Inner upper incisor bifid, with a well-marked external secondary cusp near its tip, wearing off in older specimens. Outer incisors small, not reaching halfway from the cingulum to the outer cusp of the inner incisors; hollowed out behind to receive the tip of the lower canine; a small secondary cusp on its internal edge. Small premolar quite minute, crushed in the angle between the canine and second premolar, which press against each other outside it; it is evidently in an extreme state of reduction, and has become altogether lost on one side in the type. Lower incisors tricuspid, transverse, overlapping.

Dimensions of the type, measured in skin:—

Forearm 38 mm.

Head and body (c.) 47 mm.; tail 44; third finger 65; lower leg and foot (c.u.) 26.

Skull—greatest length to base of incisors 12·7; basal length in middle line 9·5; mastoid breadth 7·2; intertemporal breadth 3; palate length 4·6; front of canine to back of m^3 4·7; front of lower canine to back of m_3 5.

Type. No. 4, sex not ascertainable. B.M. No. 6.8.1.18.

Although without any very strongly marked characteristics, this dull-looking little bat does not agree with any species hitherto described. Altogether Australia is poor in members of this widely distributed genus, the only other *Pipistrelles* being one from N. Australia, referred to *P. abramus*, and the large and aberrant *P. tasmaniensis*.

The two specimens of *P. regulus* sent home by Mr. Shortridge were not captured by him, but were made into skins from old mounted specimens.

6. *CHALINOLOBUS GOULDI* Gray.

♂. 144, 145, 146, 147. Parker's Range, Southern Cross. 1163'. 9–17 August.

♂. 150, 151, 152, 153, 154, 155, 156, 157, 159. ♀. 149, 158, 160. Jaurdi Hills, near Kalgurli. 1250'. 21–24 September.

♂. 169. ♀. 168. North Pool, Laverton. 1650'. 28 October. Not previously recorded from Western Australia.

7. *CHALINOLOBUS MORIO* Gray.

♂. 50 (in spirit). King River, King George's Sound.

8. *SCOTEINUS BALSTONI* THOS.

Abstr. P. Z. S. No. 31, p. 2, May 8, 1906.

♂. 173. ♀. 170, 171, 172. North Pool, Laverton. 1650'. 19-26 October, 1905.

♀. 177 (in spirit). Hawksnest, Laverton. 1650'. 7 November.

Allied to *S. greyi* Gray; the fur bicolor instead of unicolor.

General characters and size very much as in *S. greyi* *. Fur of medium length; hairs of back about 4.5 mm. in length. General colour above, when the hairs are smoothed down, pale brown (varying from a tone between wood-brown and fawn to one between fawn and drab), this colour occupying the terminal third of the fur, the basal two-thirds being dark smoky brown, contrasting markedly with the light tips. Below, the hairs are equally dark at base, with their tips pale pinkish buff. Hairs of chin, throat, and pubic region nearly or quite pale to their bases. Ears and membranes pale brown throughout.

Ears slightly larger than in *S. greyi*, but very similar in shape. Wings to the base of the outer toe. A well-marked postcalcareal lobule present.

Skull broad, stout and flat, as usual in this group; larger and flatter than in the alcoholic topotype *a* of *S. greyi*. A well-marked occipital "helmet" present, but the anterior ridge from it does not run forward on to the middle line of the frontals, where, indeed, there is a slight longitudinal concavity. Brain-case rather small in proportion to the size of the skull.

Teeth about as in *S. greyi*. Upper incisors standing rather further away from the canines.

Dimensions of the type, the starred measurements taken in the flesh :—

Forearm 36 mm. (four other specimens 34-35).

*Head and body 55; *tail 40; *hind foot 7; *ear 15 (13 in a spirit-specimen).

Skull—greatest length to base of incisors 15; basal length in middle line 10.8; zygomatic breadth 10.1; front of upper canine to back of m^3 5.2; front of lower canine to back of m_3 5.9.

Type. Adult female. B.M. No. 6.8.1.41. Original number 170.

Although the essential characters of this bat are very much as in *S. greyi*, its conspicuously different bicolor fur readily separates it from that species, whose fur is quite unicolor, dark brown or chestnut. No doubt better material of *S. greyi*, for comparison, would show further points of difference.

I have had much pleasure in naming this well-marked species in honour of Mr. Balston, to whose generosity science is indebted

* The alcoholic specimen *a* of *S. greyi*, called "*type*" by Dobson (who was under the impression that the species was first described by himself), is rather smaller than the skin figured by Gray in the 'Voyage of the Erebus and Terror,' specimen *b* of Dobson's Catalogue. Now that a named figure is recognised as conferring priority, the species will stand to Gray's credit, with specimen *b* the type of it. Even were Gray's naming invalid, however, Gould's description in the 'Mammals of Australia' (1858) would antedate Dobson's.

for the valuable results due to Mr. Shortridge's expedition to Western Australia.

9. *NYCTINOMUS AUSTRALIS* Gray.

♀. 176. North Pool, Laverton. 29 October, 1905. 1650'.

This is the first record of this fine species in Western Australia. The specimen does not seem to differ in any important respect from the type described by Gray.

That type, however, is not specimen *a* of the Catalogue, a spirit example presented by Mrs. Stanley in 1855, but specimen *d*, which was purchased in 1861 at Stevens's sale-rooms, from the collection of the United Service Museum, to which it had been given in or before 1838 by Major Macarthur. Both the original description by Gray in 1838, and an independent one by Gould in the 'Mammals of Australia' (1858), agree so closely with this specimen as to show that no error has been made in tracing its history.

Mr. Shortridge says: "These Bats come out rather late and are swift flyers. When passing over water they often dive right into it, probably in pursuit of water-beetles. The stomach contained remains of beetles."

10. *MUS RATTUS* L.

♂. 53, 61, 62. ♀. 60. King River.

11. *MUS NORVEGICUS* Erxl.

♂. 69. ♀. 59. King River.

12. *MUS MUSCULUS* L.

♂. 126, 129, 130, 131. ♀. 127, 128. Cookerline Lake Southern Cross. 1163'.

♂. 133. ♀. 132. Parker's Range, Southern Cross.

♂. 165. Jaurdi Hills, near Kalgurli. 1250'.

♀. 174. North Pool, near Laverton. 1650'.

♀. 178. Hawksnest, near Laverton. 1650'.

♂. *1, 4, 5, 6, 39, 52, 64. ♀. 3, 9, 17, 33, 38, 51. King River.

13. *MUS FUSCIPES* Waterh.

♂. 9, 12, 14, 15, 31. ♀. 6, 7, 10, 11, 32, 54, 63. King River.

These specimens are clearly Waterhouse's *M. fuscipes*†, of which they are practically topotypes, while the aquatic Rat figured and described by Gould as *M. fuscipes* in the 'Mammals of Australia'‡ should bear Gray's name of *M. lutreola*§.

* The figures in italics represent specimens numbered by species before Mr. Shortridge commenced the continuous notation of his skins.

† Zool. Voy. 'Beagle,' Mamm. p. 66, pl. xxv. (1839).

‡ Vol. iii. pl. xi. (1851).

§ Grey's 'Expeditions in Australia,' ii. Appendix, p. 409 (1841).

14. *HYDROMYS FULIGINOSUS* Gould.

♂. 8, 57. ♀. 4, 65. King River.

♂. 4, 6. ♀. 5. Big Grove, King George's Sound.

"Trapped near water. Feeds chiefly on fresh-water Crustacea."
—*G. C. S.*

These specimens all agree in their dark colour with the original specimens described by Gould.

15. *MACROPUS GIGANTEUS* Zimm.

♀. 18. King River. 100'.

Represents the *M. ocydromus* of Gould.

"Caught by dog. Not plentiful around King River."—*G. C. S.*

16. *MACROPUS RUFUS* Desm.

♂. 182, 183, 184, 185, 186, 188. ♀. 180, 181, 187. Hawks-nest, near Laverton. 1650'.

One of these specimens, a male, is abnormal in having a well-marked rudimentary pouch in the position of that of the female. Only one of the testes of this example had descended into the scrotum.

Although at the date of the 'Catalogue of Marsupials' the Red Kangaroo was not known with certainty to occur in Western Australia, it has since been recorded by several observers, and Mr. Rothschild has given a subspecific name to a form of it from the north-west corner of the continent.

17. *MACROPUS IRMA* Jourd.

♂. 23. Mount Barker, Southern Cross. 500'.

♂. 4, 44. ♀. 16. King River. 100'.

"Local name, 'Brush Kangaroo.' Seldom seen in the daytime, comes out to feed in the evening."—*G. C. S.*

18. *MACROPUS EUGENEI* Desm.

♀. 1. Arthur River, Wagin.

19. *MACROPUS BRACHYURUS* Quoy & Gaim.

♂. 19, 20, 23, 34, 56. ♀. 58, 67, 68. King River.

♂. 10, 11, 12, 13, 15. ♀. 9, 14, 16. Big Grove, King George's Sound.

"Seems to be found only along the coast districts. Trapped in marshy ground with maize as bait."—*G. C. S.*

20. *ONYCHOGALE LUNATA* Gould.

♂. 2. ♀. 1. Arthur River, Wagin.

21. *BETTONGIA PENICILLATA* Gray.

♂. 5, 6. ♀. 3, 4, 35, 40. King River.

"Trapped with oatmeal."—*G. C. S.*

22. *BETTONIA LESUEURI* Quoy & Gaim.

♀. 1, 2. Arthur River, Wagin. .

23. *TARSIPES SPENSERÆ* Gray.

♂. 70. ♀. 2. King River. .

"No. 70. Caught in the bottom of a well."

"No. 2. Had one young in the pouch; probably just born, being about the size of a grain of wheat."—*G. C. S.*As Mr. Palmer has shown*, Gray's name *spenseræ* has priority of publication over that of *rostratus* given by Messrs. Gervais and Verreaux.24. *DROMICIA CONCINNA* Gould.

♀. 192. Southern Cross.

25. *TRICHOSURUS VULPECULA* Kerr.

♂. 24, 25, 27, 28, 30. ♀. 26, 29. Mt. Barker.

♂. 41, 48, 49, 55, 73, 74. ♀. 3, 4, 20, 36, 42, 45, 46, 47, 66, 71, 72. King River.

"Trapped among Red Gums. Bait, oatmeal."—*G. C. S.*The majority of these specimens have the end of the tail white, thus corresponding with Ogilby's *Phalangista xanthopus*†.

Mr. Shortridge says that "specimens without the white tip to the tail are considered rare."

26. *THALACOMYS* ‡ *LAGOTIS* Reid.*Peragale lagotis* of the 'Catalogue of Marsupials.'

♂. 1. Arthur River, Wagin.

♀. 134. Parker's Range, Southern Cross.

"The tail seems to be slightly prehensile."—*G. C. S.*27. *ISOODON OBESULUS* Shaw.*Perameles obesula* auctorum.

♂. 21. ♀. 1. King River.

♂. 3, 5. ♀. 4. Big Grove, King George's Sound.

♂. 6. Arthur River, Wagin.

"Native name, 'Waint.'

"Trapped in marshy country."—*G. C. S.*

It appears to me that it would be more in accordance with the modern estimate of the value of genera to subdivide the old genus

* Index Gen. Mamm. p. 664, footnote (1904).

† P. Z. S. 1831, p. 135.

‡ Mr. Palmer (Index Gen. Mamm. p. 677, 1904) criticises my adoption of the term *Thalacomys* for this genus on the ground that it is an "obvious misprint" for *Thylacomys*, which latter was used (but as a *nomen nudum*) in the 'Athenæum' two years before Blyth put *Thalacomys* in a tenable manner in his 1840 edition of Cuvier. But we ought to be very chary of changing names, supposed to be misprints, unless their obviousness as such is quite clear, and in this case I do not think we are justified in calling *Thalacomys* a misprint, when it was the second of the two forms to occur, as though it had been "corrected," and was again twice repeated by its author in subsequent editions (*cf.* Ann. Mag. N. H. [7] v. p. 222, 1900).

Perameles into four, corresponding to the groups A, c, e', and f' of the cranial synopsis of the species in the 'Catalogue of Marsupials.' These are all natural groups of species, easily distinguishable both by external and by well-marked cranial characters, as follows:—

ISOODON Desm.

Type, *I. obesulus*. Other species, *macrurus*, *moresbyensis*, *auratus*, *barrowensis*.

Incisors $\frac{5}{3}$. Bullæ large, complete, pear-shaped.

ECHYMIPERA Less.

Type, *E. doreyana*. Other species, *cockerelli*.

Incisors $\frac{4}{3}$. Bullæ small, hemispherical, more or less incomplete.

PERORYCTES, g. n.

Type, *P. raffrayanus*. Other species, *broadbenti*, *longicaudatus*, *ornatus*.

Incisors $\frac{5}{3}$. Bullæ as in *Echymipera*. Brain-case normal. Lacrymal bone rounded externally.

PERAMELES Geoff.

Type, *P. nasuta*. Other species, *gunni*, *bougainvillei*, *eremiana*.

Incisors $\frac{5}{3}$. Bullæ small, hemispherical, complete. Brain-case abnormally short. Lacrymal forming a sharp overhanging edge externally.

All the Australian species thus fall into *Isodon* and *Perameles*, which were long ago recognised as very different groups by Gould. The other two genera are Papuan.

With regard to the name used for the first genus, *Isodon*, I find on reconsideration that my selection of *obesula* as the type of *Thylacis* Illiger was incorrect, as it is in opposition to the sound principle supported by Dr. Allen*, that if a genus contains exactly the same species as an earlier one it is a synonym of that one, and no elimination or selection of different types can make it valid. For *Thylacis* (and *Thylax* Oken also) consisted of *obesula* and *nasuta*, which were likewise the constituent members of the original *Perameles*, so that neither *Thylacis* nor *Thylax* can be withdrawn from their positions as full synonyms of that genus, and the next name in date, *Isodon*, has to be taken for the common Australian Bandicoot.

28. DASYURUS GEOFFROYI FORTIS, subsp. n.

♂. 1, 2. Arthur River, Wagin. Alt. 840'.

Similar in essential characters to true *geoffroyi*, but larger, the difference specially marked in male skulls. Externally *fortis* has the belly hairs whiter terminally, while in true *geoffroyi* they are more or less tinged with creamy yellow. The underside of the tail is dark for a rather greater extent. Skin of palms,

* Bull. Am. Mus. N. H. xvi. p. 116 (1902). See also Thos., P. Biol. Soc. Wash. xv. p. 153 (1902).

sides and underside of digits wholly blackish; in *geoffroyi* there is generally a whitish tinge on these parts.

In the skull the only point to be noticed, besides the superior size, is that the bullæ are decidedly larger in *fortis* than in *geoffroyi*.

Dimensions of the type, measured in the flesh:—

Head and body 650 mm.; tail 350; hind foot 63; ear 50.

Skull—basal length 72 mm.

Type. Male. B.M. No. 6.8.1.340. Original number 1. Collected 1 July, 1905, by G. C. Shortridge.

In the 'Catalogue of Marsupials' I drew attention to the greater size of the West Australian representatives of the Black-tailed Dasyure; and now that Mr. Shortridge's specimens fully confirm the difference, I think the animal should have a subspecific name. More detailed skull-measurements are given in the Catalogue.

In the female sex there does not seem to be so marked a difference between the two forms, but the material available for comparison is at present very imperfect.

29. PHASCOGALE FLAVIPES LEUCOGASTRA Gray.

♂. 1, 4. ♀. 2, 3, 5. King River.

These fresh examples of the West Australian form of *Ph. flavipes* are very welcome, as the few skins contained in the Museum collection are much deteriorated. Mr. Shortridge's specimens, coming from the rainy south-west district, are of a rather more "saturate" colour than the old skins, but how much these latter have faded it is not easy to say.

30. SMINTHOPSIS MURINA Waterh.

♂. 1, 2, 3. King River.

"Trapped on marshy ground in Ti-tree scrub."—*G. C. S.*

31. MYRMECOBIUS FASCIATUS Waterh.

♀. 1. Arthur River, Wagin.

32. TACHYGLOSSUS* ACULEATUS INEPTUS Thos.

Abstr. P. Z. S. No. 31, p. 2, May 8, 1906.

♂. 122, 123, 124. ♀. 125. Parker's Range, Southern Cross.

A very spinous form, with small brain-case and short snout.

Coat completely spinous, no hairs perceptible on the upper surface at all, except the well-marked tuft over each ear. Below also the fur consists wholly of flattened bristles. Colour above more mottled than usual, owing to the large proportion of white or black and white spines. Third hind claw not lengthened, little longer than the fourth, as usual in typical *aculeatus*.

Skull small, with a fairly broad but not greatly inflated brain-case and very short snout. As a result the index of breadth is as high as in the large Tasmanian *T. a. setosus* (average of three

* Not *Echidna*. See Ann. Mus. Genov. [2] xviii. p. 621 (1897).

skulls 45·1), while the rostral index (78·8) is very considerably less than in any specimens hitherto recorded.

The following measurements, when compared with the table I published in 1885*, will show these differences better than any description :—

	Greatest length.	Greatest breadth.	Index of breadth.	Length of brain-case.	Length of rostrum.	Rostral index.	Inter-orbital breadth.
123 ♂ ...	104	47·8	45·9	56·5	43·5	76·9	15·5
124 ♂ ...	103·5	46·7	45·1	54·5	43	78·8	15
125 ♀ ...	103·8	46	44·3	54·5	44	80·7	15·5
Averages...	103·7	46·8	45·1	55·1	43·5	78·8	15·3
Averages in true <i>aculeata</i> }	110·9	45·7	41·2	53·4	53·2	99·7	—

As usual in mainland specimens there are no condyloid vacuities. Nasal and anterior palatine foramina short. Postorbital projection unusually strongly marked. Anterior, cylindrical, part of zygomata bowed downwards, so as to form a more or less downwardly projecting angle; as a result of this, when the skull is laid on a flat surface the tip of the muzzle stands up some way above the surface, as though the muzzle itself were bent upwards; in true *aculeata* it lies perfectly flat.

External dimensions of the type, taken in the flesh :—

Head and body 420 mm.; tail 90; hind foot 55.

Type. Adult male. B.M. No. 6.8.1.363. Original number 123. Collected 16 August, 1905.

The first discoverer of the *Echidna* in Western Australia was Mr. Gilbert, who, in collecting for Mr. Gould about 1840, obtained specimen *h* of the 'Catalogue of Marsupials.' Another example, in every way similar to those now sent by Mr. Shortridge, was presented to the Museum by Baron F. von Müller in 1888. The animal has therefore long been known to inhabit this region, but for a knowledge of its correct affinities we are indebted to the uniform series presented by Mr. Balston.

That West Australia should possess a special race is only natural, since New Guinea, Eastern Australia, and Tasmania have each a characteristic form.

In Mr. Rothschild's recent description of *Echidna hystrix multiaculeata*† no reference is made to the skull; but from the locality (South Australia) and the presence of hairs between the spines it would appear to have nothing to do with *T. a. ineptus*.

* P. Z. S. 1885, p. 335.

† Nov. Zool. xii. p. 306 (1905).